## **CLAIMS**

What is claimed is:

- 1. A vortex generator for a surface which generates a primary tip vortex, said vortex generator comprising:
- a plurality of vorticity generating protuberances which generate small-scale vortices that are at least partially entrained within the primary tip vortex.
- 2. The vortex generator as recited in claim 1, wherein said surface comprises an aerodynamic surface.
- 3. The vortex generator as recited in claim 1, wherein said surface comprises a rotating aerodynamic surface.
- 4. The vortex generator as recited in claim 1, wherein said surface comprises a rotor blade.
- 5. The vortex generator as recited in claim 1, wherein said plurality of vorticity generating protuberances comprise deployable members.
- 6. The vortex generator as recited in claim 1, wherein said plurality of vorticity generating protuberances extend from a tip of the surface.

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7. An aerodynamic member comprising:
an outboard section terminating in a tip which generates a primary tip vortex; and
a plurality of vorticity generating protuberances which extend from said tip, said
plurality of vorticity generating protuberances generate small-scale
vortices that are at least partially entrained within the primary tip
vortex.

- 8. The aerodynamic member as recited in claim 7, wherein said tip comprises a distal end of rotor blade.
- 9. The aerodynamic member as recited in claim 7, wherein said tip comprises a distal end of a wing.
- 10. The aerodynamic member as recited in claim 7, wherein said tip comprises a distal end of a propeller.

- 11. A method of accelerating diffusion of a primary tip vortex comprising the step of:
  - (1) generating small-scale vortices that are at least partially entrained within the primary tip vortex to destabilize a core of said primary tip vortex.
- 12. A method as recited in claim 11, wherein said step (1) further comprises locating a plurality of vorticity generating protuberances on a tip of a rotating member which generates the primary tip vortex.
- 13. A method as recited in claim 11, wherein said step (1) further comprises locating a plurality of vorticity generating protuberances on a tip of a fixed member which generates the primary tip vortex.
  - 14. A method as recited in claim 11, further comprising the step of: selectively extending a from a tip which generates the primary tip vortex.